

# HAMATEUR CHATTER

The Milwaukee Radio Amateurs Club

May, 2010, Volume 18, Issue 5

One of the World's Oldest Continuously Active Radio Amateur Clubs—since 1917

## Presidents Letter

**Action.** By now, for those that actually read the newsletter every month, you know I start every column with a single word that is the basis for the main topic of the President's letter. My focus for this month's column is a call for action. I have announced I will not run for another term as president. I've been involved as an officer for most of the last 9 years as either VP, Treasurer or President. At last May's special election my plan was to run for another term as president at the completion of the one year term. A number of factors have caused a change to the plan. I feel we (the board and membership) have made progress towards improving the state of the club over the last year and the club is poised to move forward. However, I have been unable to generate any substantial support from the membership to continue (what I view as) the rebuilding effort. I haven't been able to fill the treasurer's position over the last year. I have been unable to get a single volunteer for our FD effort this year. I have recently received a critique on my leadership skills indicating I'm better suited as an engineer than a manager. I get fairly regular feedback at meetings that indicate some level unhappiness with actions for which I've been responsible.

I've encountered a concept within the club by many (certainly not all) that belonging to this club is about 'what is the club doing for me', instead of 'what can I do to support the club'. I believe joining a club means being a part of a community where we all work to help each other. It is about contributing to the group. I can honestly say this is one problem I've failed to fix or improve over the last year. In a true engineering calculation I've factored in

the above, reviewed an assessment of my own performance and come to the decision that MRAC is most likely going to be more successful with new leadership. I plan to continue to be active within the club. I have postponed a number of activities with our repeater while holding down both the president and treasurer duties. I will take advice given and put my 'engineering personality' to use in more suitable areas.

I promise to be available to the next president (and treasurer) over the next year to advise and guide to whatever extend they require.

The above scenario requires you take ACTION. I've heard much talk at meetings. However, ACTIONS speak louder than words. It's easy to be critical, but it really doesn't take much more effort to turn the time and effort to generate criticism (a negative) into a problem solved (a positive). The upside of this small addition of time is the whole group benefits and even better is that you benefit for the satisfaction of contributing to the group. The bottom line is actions speak louder than words. Having said this, remember we have elections this month. Now is the time you must take action. As it stands, if YOU don't do it, no one else will. Don't wait for someone else to be the ACTION person.

We also have our annual auction this month. Bring any items you wish to sell. Bring a few friends. Have them bring stuff to sell (all MRAC meetings are open to non-members). The more people there, the more bidding and the more items you'll have to bid on.

I outlined how we will run field day this year in last month's column. The short version is all are welcome to operate at FD this year but you will need to set up and take down your own station (radio, feed-line and antenna). This doesn't



## MRAC Officers:

### Terms Expiring in 2010

- President – Mark, AB9CD
- V-President-Brian, K9LCQ
- Secretary – Mike, KC9CMT
- Treasurer – Vacant
- Director – Dave, WB9BWP
- Director – Dave, KA9WXN

### Terms Expiring in 2011

- Director – Al, KC9IJJ
- Director – Hal, KB9OZN
- Director – Dwain, KC9MJJ

**The Club Phone Number  
is: (414) 332-MRAC or**

**(414) 332- 6 7 2 2**

Visit our website at:

[www.w9rh.org](http://www.w9rh.org)

Mail correspondence to:

**M. R. A. C.**

P.O. Box 240545

Milwaukee, WI 53223

mean there won't be any help. We'll work as a group just as in the past. The difference will be you direct the work effort with the assistance of your helpers. We do need to know when you wish to operate to coordinate the number of transmitters and active modes (our transmitter limit is based on available generator power). Therefore, you must make a reservation by sending an email to me (call sign at arrl.net) or to the club email address. Provide the hours you wish to operate, band(s) and mode(s). You will be responsible for planning your arrival time in advance of your operating time for setup, etc. We expect hours you request will be active at least 75% of the time. Sign up for all 24 hours and make it easy to plan!

We received positive feedback on the show and tell meeting last month. We will plan another one of these meetings next fall.

Another reminder, MRAC is returning to its roots this summer. We will not meet in July and August as done from the beginning of the club in 1917 until sometime in the 60's or 70's. The thinking that went into this change were based on summers being so short that competition for meeting nights in the summer was just too much. We kept the June meeting to allow the transfer to the new officers and directors and to take care of any last minute field day business. Traditionally this break for the summer allowed the new officers to gather and plan the upcoming year. Of course, this will be up to the new leadership to decide.

Remember, this is YOUR club and IS what YOU make it. As always, I would like to know what you think about anything in this column or about the club in general.

Mark AB9CD

## Club Business & Amateur Radio Information

### MRAC Elections

As of May 18th we have two candidates that have accepted nomination to office: **Dave Shank, KC9WXN director, & Michael, KC9CMT as Secretary.**

The operation of our club is important business to those of us who are committed to our hobby. A club can not operate without a leadership structure. I urge all or any members that have an interest in the continued operation of their Amateur radio club to step forward and accept nomination to a director or club officer position.

We are in dire need of someone to run as president, Vice-president, Treasurer and position of Director.

Support your club and get involved in its month to month activities. It is more fun than work. It is always interesting to be one of the people in charge of things.

The nomination committee made a polling of the clubs' membership for the third and last time in the first week of May. No suggestions arose from that contact. The club president has decided that the club nominating chairman can accept nominations from the floor during the club election meeting in May before the auction. We sincerely hope that some people will step forward to help in the leadership of their club for the coming year.

*Sincerely, Michael, KC9CMT  
Election Chair*

### MAY MEETING IS ANNUAL MEETING

**Per the bylaws our annual meeting in May is a special meeting for the purposes of holding elections. Expect additional special meeting business regarding changes to the bylaws.**

**Amateur Radio**  
**Goodwill • Service • Fun!**  
[www.arrl.org](http://www.arrl.org)

# Board of Director's Meeting Minutes

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Meeting called to order at 6:57 PM.

Present: Mark AB9CD, Brian K9LCQ, Dave DeFebo WB9BWP, Dwain, KC9MJJ, Hal KB9OZN, & Michael KC9CMT. President declares that Board Meeting has a quorum, and can proceed.

Excused: AL KC9IJJ, Dave KA9WXN.

Secretary report read by Michael, KC9CMT. Motion to accept Board of Directors' Meeting Minutes as read. Motion made by Dwain, KC9MJJ, Second by Brian, K9LCQ. Accepted by a vote of 6-0

Treasurer Report read by Mark, AB9CD for the period of March 1st to March 31st, 2010. General Funds' ending balance was \$13,798.04, Total funds at this report \$14,655.92. Updated treasurers' report to be uploaded to yahoo group. Motion made to accept treasurers' report as read made by Brian, K9LCQ Seconded by Hal, KB9OZN. Motion to accept carried by voice vote of 6-0.

## PRELIMINARY DISCUSSIONS:

DVD's were given away at AES SuperFest. None were sold. DVD's were given out to Gordon West & ARRL staff at SuperFest. Dave, WB9BWP brought audio recording tapes to the meeting for discussion. Dave wants to convert the audio tapes to DVD formatted files. Dave still needs to buy DVD labels.

## Repeater Report:

No unusual activity noted during April. Activity is being monitored by club officers.

## Old Business:

Xmas Party: Party set for December 5th 2010 at Meyer's in Greenfield.

2011 SwapFest: No movement on this subject during April. Great need to find a location and time that will fit into scheduling. More discussion to follow at next meeting.

Elections: Nominating Committee to poll membership one more time before elections at May meeting. Still in need of Candidates to run for club office and director positions. Phone calls will be made to a select number of club members soliciting their help.

## Programs:

April: Show & Tell Night. Fix ups Etc. Projects or New Purchases from the Membership.

May: Elections and the annual Auction. Hosted by Dave DeFebo.

June: Dave Shank will be back to discuss D-star from a users viewpoint.

July & August: No meetings Scheduled.

September—December: No programs scheduled yet. Suggestions for new programs: Robots, Solar Power, Electric Cars.

Misc: FM Simplex Contest Certificates need to be sent to Brian for Printing.

## New Business:

Volunteers: There is a great need to develop interest in Club positions and activities. Board may decide to drop the number of elected positions. No restructuring of club officer positions will be done before the May election Meeting. Discussion has been tabled for this month.

Field Day: MARK, AB9CD has decided to have a scaled down Field day this year due to waning interest from the membership. Club will run as 3AW this year at Pioneer Village using member supplied equipment and a few club radios. Stations will be set up and time booked on available radios. See MARK, AB9CD to book radio time. Waukesha mentioned as possible future site of FD by Brian.(Brian lives in Waukesha) Board of Directors' voted to conduct Field day this year as proposed by MARK, AB9CD at Pioneer Village site.

Net Committee: Poncho, K9FLD, made up a preamble that was accepted by the board with only minor revision. Committee should be formed at May board meeting.

Club Rosters need to be printed up for the May meeting per the by-laws, MARK, AB9CD stated that he would take care of this.

Club Badges: The Board is working on the idea of Club Badges for the membership who would want one. Mark, AB9CD has picked out a vendor and has the program ready to be enacted. So anyone may order a club designed badge if they should want one.

Club Business Cards: MARK, AB9CD has designed and will have printed a batch of business cards that can be given out at various functions to advertise the club.

MRAC sign removed from AES for updating. Sign needs new Phone number applied.

Anyone not paying dues by May 1st, will be removed from the yahoo group list by May 4th.

Motion to adjourn at 8:54 PM . Motion made by Hal, KB0OZN, Second by Brian, K9LCQ. Passed on voice vote without dissent 6-0.

Room returned to condition as found upon arrival.

Respectfully submitted,

*Michael, KC9CMT*

# Membership Meeting Minutes

## General Membership assembly called at 7:08pm.

Microphone passed along with attendance sheet for introductions @ 7:09pm.

Cost of Refreshments' was discussed; need to at least break even. Meeting minutes read into the record and a motion to accept the minutes as read was made by AL, KC9IJJ and Seconded by Hal, KB9OZN. Voice vote taken to accept without dissent.

Mark, AB9CD, read the Treasurers' report into the record with a copy being given to club secretary for reporting purposes. Ted, WA9ADI, asked a question regarding the Club CD's Interest rate. This was answered by the treasurer. Club account holds \$14,665.92 at the time of this report. A motion was made by Joe, N9UX, and Seconded by Hal, KB9OZN to accept the report as read with passage on voice vote without dissent.

### Old Business

The Club is discussing how to recruit new members and give recognition to those qualifying for life membership status.

Ted, WA9ADI asked about phone bill, which mark discussed. Club is paying over 1/2 the bill while the VEC also uses the account. The club President is thinking about changing the phone services offered, such as dropping options such as ring tone. VEC will not be using the Club phone account in the future. Phone company charges MRAC as a business concern. MRAC is a Corporation in the eyes' of the State. Present bill is \$96/mo.

Mark, AB9CD thinks he can get the Rain report started within two months of holding a single club position.

Everett, K9PSX, mentioned QST article regarding publicity.

### New Business

Suggestion made to bring back buzz talk.

Mark, AB9CD talked about the idea of making up Club badges for the membership. It's been 5 years since club bought any(2001). Two venders are now being considered. Badges will be group ordered at \$7-\$8 each. The club has a file to use for Logo, but this needs updating. AL, KC9IJJ wants Est. 1917 to stay on new badges.

Ideas' discussed about amount of dues, stay at \$17 or increase to \$20.

Hal, KB9OZN volunteered to help with audit of club financial accounts this year.

Upcoming elections discussed by Michael, KC9CMT, Club still needs people to volunteer for election to office. Nominations will be taken from the floor at May election meeting.

Dave DeFebo, WB9BWP has volunteered to work the auction again this year.

Some people still not receiving the Email chatter, Editor will looking into this.

Club will have FD Without club equipment installation this year. No organized events at FD this year such as food, or setup. Club members have been invited by Mark, AB9CD to come to Pioneer village site and work with their equipment installations. See Mark, AB9CD for a time slot. Club members can use club equipment stored on site, but must install and teardown after use.

The FD time slot schedule will be posted as a PDF on the MRAC yahoo group. Poncho stated he is cancelling Breakfast & 6 meter net until further notice due to lack of interest.

Motion to adjourn business meeting made at 8:04pm by Mark, AB9CD and seconded by Hal, KB9OZN. Motion passed by voice vote without dissent.

## Membership Meeting: Called to order at 8:17pm.

### Program for tonight's meeting: Membership show & Tell

Participating:

Mark, AB9CD, Ten-Tec Kit

Jerry Riedel, K9FI, Portable Antenna

Everett Hokanson, K9PSX, UHF Discone Antenna

Joe Schwartz, N9UX, Homebrew Transmitter

Alfred Huwald, K9LQ, Homebrew GPS/Cellphone Battery

Jack Hughes, W9ULA, Call Sign Jewelry

Michael B. Harris, KC9CMT, VLF Radio design  
 Dave Defebo, WB9BWP, Kill-A-Watt meter.  
 Poncho Doneis, KA9OFA, QRP Transmitter  
 Steve Sandquist, N9FSE, Ultimate Shack Assistant.

## Next Regular Meeting

The next meeting will be May 27th at 7:00PM. We meet in the Fellowship Hall of Redemption Lutheran Church, 4057 N Mayfair Road. Use the south entrance.

**Please do not call the church for information!**

## Club Nets

Please check in to our nets on Friday evenings.

Our ten meter SSB net is at **8:30 p.m. at 28.490 MHz USB.**

Our two meter FM net follows at 9:00 p.m. on our repeater at

**145.390 MHz** with a minus offset and a **PL of 127.3 Hz.**

Visit our website at: [www.w9rh.org](http://www.w9rh.org)

**Or phone (414) 332-MRAC or 332 - 6722**

## Chatter Deadline

The **DEADLINE** for items to be published in the **Chatter** is the 15th of each month. If you have anything (announcements, stories, articles, photos, projects) for the 'Chatter, please get it to me before then.

You may contact me or Submit articles and materials by e-mail at: [Kc9cmt@earthlink.net](mailto:Kc9cmt@earthlink.net)

or by Post at:

Michael B. Harris

807 Nicholson RD

South Milwaukee, WI 53172-1447

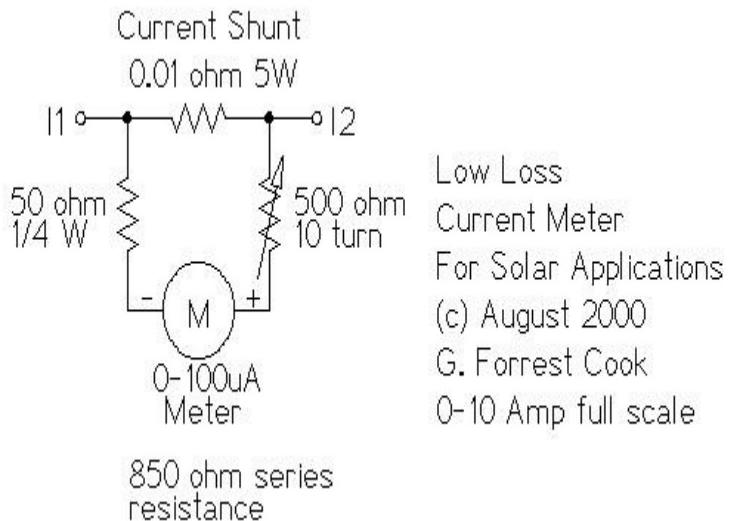
**Club Repeater,  
145.390Mhz Minus Offset  
(127.3 PL)**

## Experimenter's Bench

# Solar Panel Current Meter

(C) G. Forrest Cook 1999

<http://www.solorb.com/elect/>



## Introduction

This circuit is used to measure the current from a solar panel. It has very low power loss for currents in the 0-10A range. It also works as a general purpose DC current meter. The circuit can be used on either the positive or negative side of a DC circuit.

## Specifications

Measured Current: 0-10 Amps DC

Circuit Voltage: Will work with DC circuits at any practical voltage.

Accuracy: approximately 2%, depending on the meter movement.

## Theory

The current to be measured flows through the 0.01 ohm resistor which causes a small voltage drop across the resistor. The 100 microamp meter is set up with the series 50 ohm and 500 ohm variable resistor in a voltage measurement configuration to measure this voltage drop. The 500 ohm variable resistor is used to adjust the meter's full scale reading. The 50 ohm resistor limits the maximum current to the meter no matter what setting is on the 500 ohm resistor, this protects the meter from passing too much current and burning up. The series resistance of the meter, 500 ohm (or less) variable resistor and 50 ohm resistor should total 1000 ohms. Different meters may require a different variable resistor to achieve the 1000 ohm value.

## Construction

Build the meter into a metal box with the meter and two connectors mounted on the outside of the box.

## Alignment

Put the meter circuit in series with a known current meter such as a digital VOM meter set to measure current. Run a known current through both meters. Adjust the 500 ohm resistor until both meters read the same current. A good way to get a known current is to put a 12V lead acid battery in series with a 2 ohm 100 watt current limiting resistor. This will produce approximately 6 Amps of current. Put the two meters in series with this loop and adjust for the same reading. Beware, the resistor will get fairly hot in a short time.

## Use

Connect this circuit in series with a nominal 12V or 24V solar panel array. The meter can go in either the positive or negative side of the solar panel circuit. The current flowing through the solar panel to the load will be shown on the meter.

## Parts

1x 100 microamp DC meter  
1x 0.01 ohm 5 W resistor  
1x 50 ohm 1/4 W resistor  
1x 500 ohm 10 turn variable resistor  
2x banana plugs or a 2 pin screw type terminal block.  
1x metal box

## Parts Sources

[Newark Electronics](http://www.newark.com)

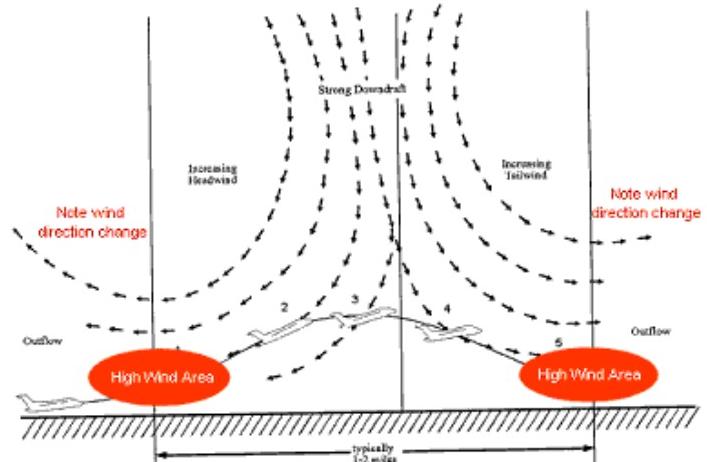
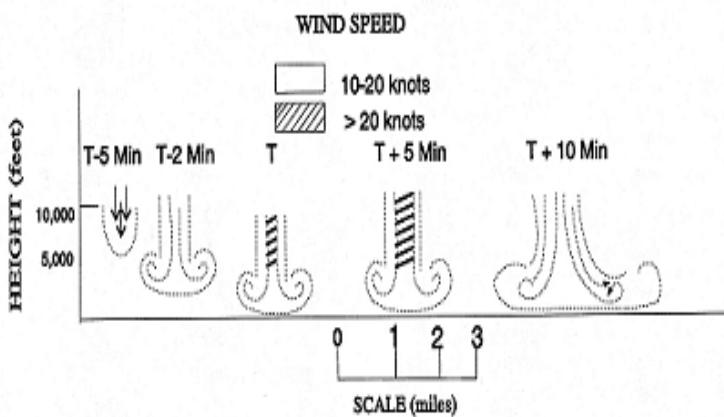
*The Author of this article has a web site where you can obtain kits and parts for Solar Projects':<http://www.cirkits.com/>*

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## The Mechanics behind the Severe Thunderstorm Microburst.

### What is wind shear?

Wind shear is the meteorologist's way of describing a rapid change in either wind speed or wind direction over a short period of time or distance. Wind shear can describe the changes either horizontally (along the Earth's surface) or vertically.



### I've heard the term downburst and microburst...what's the difference?

A downburst is a strong downdraft which causes damaging winds on or near the ground. The term "microburst" describes the size of the downburst. A comparison of a microburst and the larger macroburst shows that both can cause extreme winds.

#### **Microburst**

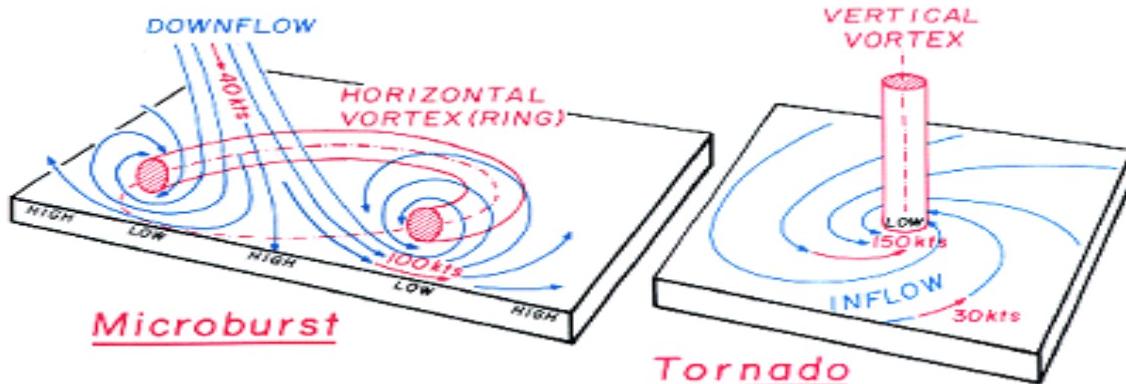
Damaging winds extending 2 1/2 miles or less  
Lasts 5 to 15 minutes. Can cause damaging winds as high as 168 MPH!

#### **Macroburst**

Damaging winds extending more than 2 1/2 miles lasting 5 to 30 minutes. Damaging winds, causing widespread, tornado-like damage, could be as high as 134 MPH!

### How are downbursts different from tornadoes?

The key difference is in two words - IN and OUT! IN - all wind flows INTO a tornado. Debris is often laying at angles due to the curving of the inflow winds OUT - all wind flows OUT from a downburst. Debris is often laying in straight lines (hence the term "straight line winds") parallel to the outward wind flow.



In this photograph, trees are blown down in a straight line - a very strong indication of a microburst as opposed to a tornado.



#### How frequently do downbursts occur?

Downbursts are much more frequent than tornadoes - in fact, for every 1 tornado there are approximately 10 downburst damage reports!

#### What visual clues should I look for with downbursts?

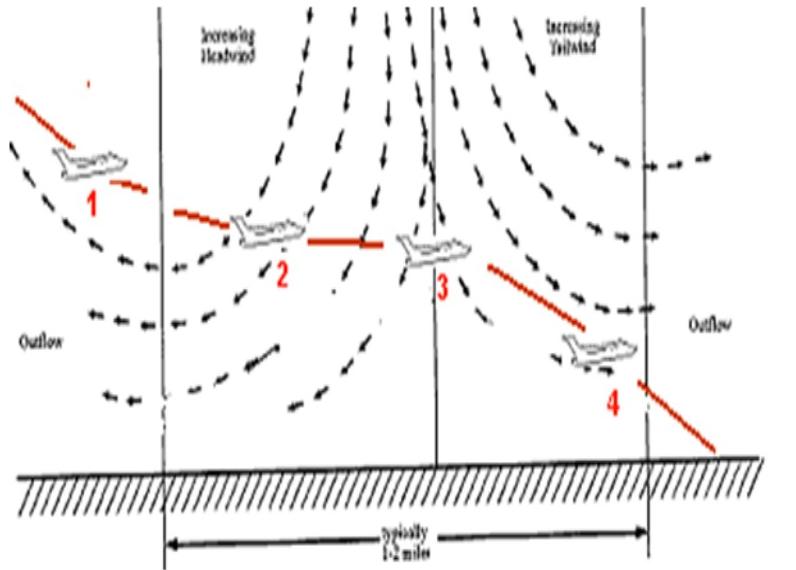
This series of photographs shows a microburst picking up dust and dirt - making the "roll" very easy to identify. Unfortunately, you can't look at a thunderstorm and "see" if it's going to be severe. Doppler radar is able to "look" inside the thunderstorms and "see" the movement of air - giving the meteorologist indications of microbursts and allowing them to issue warnings.

#### Why are downbursts so dangerous to airplanes?

The rapid change in wind speed and/or direction poses a very real threat to airplanes during take-off and landing.

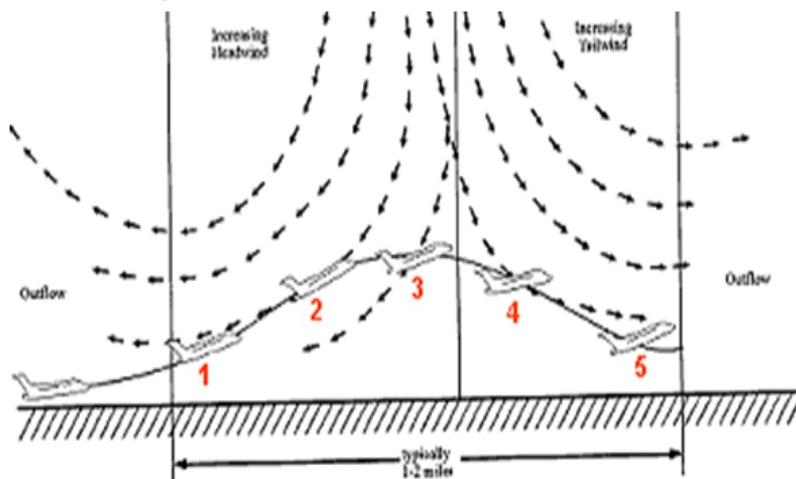
During landings-

1. The airplane begins the descent
2. flying into a strong headwind
3. a downdraft
4. and finally a strong tailwind
5. represents the extreme situation just prior to impact



During take-offs -

1. The pilot experiences a headwind and increased aircraft performance
2. followed by a short period of decreased headwind
3. a downdraft
4. and finally a strong tailwind



### August, 1983 Washington, D.C. Microburst event.

In August, 1983, the strongest microburst recorded at an airport was observed at Andrews Air Force Base in Washington DC. The winds speeds may have exceed 150 MPH in this microburst.

The peak gust was recorded at 211 M PH- 7 minutes after Air Force One, with the President on board, landed on the same runway as the microburst was recorded!

### Why downbursts are often mistaken for tornadoes

- Both can have very damaging winds
- o Tornado winds range from 40 to over 300 MPH. Downburst winds can exceed 165 MPH
- o A loud "roaring" sound
- o Wind speeds of 75+ MPH will often sound very load - leading some to believe they heard a tornado when in fact they only heard a straight-line wind
- o Trees were "twisted" off - so it must have been a tornado
- o This is one of the most common mistakes - the fact that trees were "twisted" off doesn't necessarily mean a tornado has gone through. If you could draw a line straight down a tree, you'd see that the tree isn't exactly alike from one side to the other. Differences in limbs and leaves may cause the tree to have more wind resistance on one side than the other. The tree begins to "twist" (much like a stop sign "twists" in strong winds), if wind speeds are high enough the tree will begin to tear apart in a twisting motion -even though the winds are relatively straight!

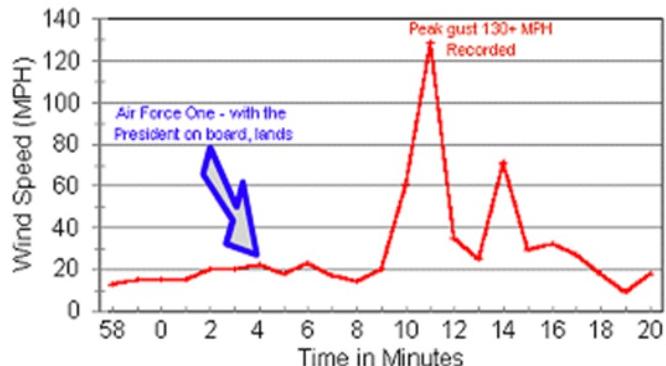
The best way to determine if damage was caused by a tornado or a downburst is to fly over the area and look down on the damage path.

**A SEVERE THUNDERSTORM WATCH** is issued when conditions are favorable for severe storms (wind gusts of 58 MPH or more or 3/4 inch diameter hail or larger).

**A SEVERE THUNDERSTORM WARNING** is issued when wind gusts of 58 MPH or greater are imminent (or large hail). In addition, AVIATION ADVISORIES are issued for Low Level Wind Shear for pilots.

## Microburst Wind Speeds

Recorded in Washington DC Aug 1, 1983



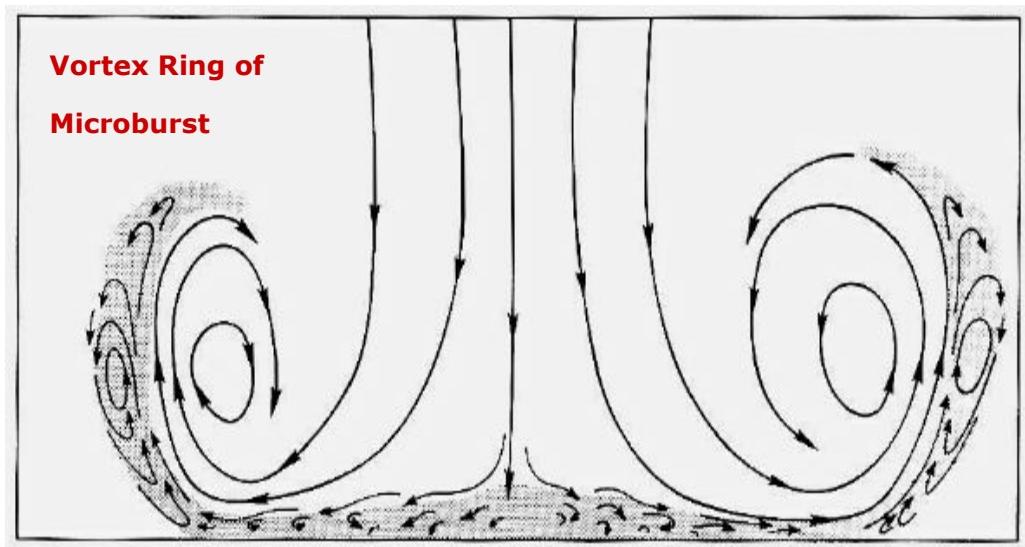
**Severe Thunderstorm warnings are sent to local radio and television stations and are broadcast over your local NOAA Weather Radio serving the warning area. These warnings are also relayed to local emergency management and public safety officials who can activate local warning systems to alert communities to the danger.**

## Microburst dynamics concluded:

### VISUAL IDENTIFICATION OF MICROBURSTS

Photographic documentation combined with theoretical treatment furnishes a powerful basis for visually identifying microbursts. Skill in such identification is important for pilots, controllers, and weather observers; identification of microbursts may be the final line of defense in avoiding a microburst-related accident or disaster.

Visual identification may be affected by the observer's perception of size and distance. As defined by Fujita (1985), a microburst is a downburst having a horizontal dimension at the surface no greater than 4 km (2.2 n mi). The spotter may be unsure of the exact horizontal dimension of a downburst that is seen. Dynamically, however, there may be little or no difference on an aircraft between a strong downburst with 5-km (2.7-n mi) diameter and a weak microburst. In some cases, a downburst may initially reach the surface as a microburst (or perhaps several microbursts) and subsequently expand into a larger scale downburst (macroburst). Indeed, it is conceivable that the parent storm could continue to develop into a supercell storm or squall line, resulting in the downburst's developing continuously into a large-scale gust front. The classification of an event as a microburst, macroburst, or gust front is a matter of judgment on the part of the spotter. The need for such judgment is not unprecedented. Trained observers are currently asked to estimate cloud height, degree of cloud cover, visibility, etc. Thus the spotter may be sure that a downburst is a microburst because its size can be estimated relative to features of known scales, such as a grid of roads 1 mile (1.6 km) apart, a crop of trees, or a row of telephone poles. Even when not certain whether an event is a microburst or macroburst, the spotter can always call it simply a downburst.



The vortex ring model of a microburst's circulation is corroborated by a number of pressure and photographic observations taken during field experiments. A small microburst passing through the Boulder Atmospheric Observatory tower showed a drop in pressure with the main downdraft (Bedard et al. 1987). Fujita (1983) observed that a microburst passing over Portable Automated Mesonet (PAM) station No. 3 during JAWS on 19 May 1982 produced a ring of low pressure surrounding its high-pressure core. Photographic evidence is furnished by Fujita's (1985) photograph of a microburst rendered visible as a ring of dust. Further, Waranauskas (see also Fujita 1985) showed the detailed vertical structure of such a ring that strongly suggests a vortex circulation.

The dynamics of an expanding ring in the deformation field at the base of a strong downdraft in the vortex ring model may explain why a microburst is observed to strengthen as it expands after surface impact (Wilson et al., 1984) at a time when it should be weakening because of frictional dissipation. The size and dynamics of a microburst may be dependent upon the scale and type of precipitation in a maturing cell. The genesis of a microburst from a downdraft may proceed as follows:

1. A concentrated rain shaft or virga shaft, on a scale of about 1 km (0.5 n mi), forms a concentrated downdraft with a very sharp edge, across which the horizontal gradient in buoyancy force generates strong torques resulting in a sheath of toroidal vorticity surrounding the downdraft.
2. The impact with the surface, and interaction with the surface friction layer, cause this sheath of vorticity to gather up into a ring vortex that spins up as it is forced to expand diameter by the outflow about the base of the downdraft.

## From the ARRL News Wire:

### International: Canadian Hams Make Use of New Privileges

After several years of hard work by the Radio Amateurs of Canada (RAC) and Industry Canada (IC) -- Canada's equivalent to the FCC -- Canadian amateurs received privileges on 2200 meters (135.7-137.8 kHz) at the first of the year. Scott Tilley, VE7TIL, of Roberts Creek, British Columbia, and John Gibbs, VE7BDQ, of Delta, British Columbia, completed the first official Canadian two-way 2200 meter QSO on April 24. Using CW, the Canadian amateurs reported strong signals during daylight QSO on 137.100 kHz. Roberts Creek and Delta are about 41 miles (66 km) apart. Gibbs used a home-brew tube transverter at 100 W output into a short top-loaded backyard wire vertical, while Tilley was running 400 W from a homebrew FET transmitter into a 60 foot top-loaded wire antenna. "As well as heralding the arrival of a new 'top band,' the QSO demonstrates that even amateurs located in typically small city-sized lots can enjoy the challenges that 2200 meters has to offer," Tilley told the ARRL. "Hopefully many other Canadian amateurs will soon be melting solder to join the fun on our new band!" More information on Canadian 2200 meter activity may be found on [Tilley's Web site](#) and at the [VE7SL Radio Notebook Web site](#).

### Solar Update

Tad "[The Sun does not shine upon this fair earth to meet frowning eyes](#)" Cook, K7RA, reports: Sunspots disappeared again. After a strong showing and nine days of sunspots, there have been four days with no sunspots. No indication when they will return, although the [STEREO image](#) shows an active area coming next week. With no sunspots again, perhaps our focus should return to low frequencies. Tom V. Segalstad, LA4LN, reports from Norway that a new temporary beacon on 509 kHz will be transmitting from grid-square JP20LL using a 35 meter (115 feet) tall vertical and 5 W until the middle of June. Look for more information on the ARRL Web site on Friday, May 14. For more information concerning radio propagation, visit the [ARRL Technical Information Service Propagation page](#). This week's "Tad Cookism" brought to you by Charles Dickens' [The Life and Adventures of Nicholas Nickleby](#) (Chapter 6).

### NEW DUES POLICY

Dues paid after May 1<sup>st</sup> will be accessed a \$3 late payment fee making dues a total of \$20 per year. Avoid the extra cost and pay your dues before May 1<sup>st</sup>. The purpose of this policy is to prevent delaying the election and auction at the May meeting with last minute payments to qualify for voting in the annual election.

## WISCONSIN Monthly ARES Section News

### \*\* Field Day preparations:

Even though it is early, here's an initial 2010 Field Day press release. This one intentionally was kept to fewer than 400 words for wire and website submissions. You can take it, modify, and make it your own and pass it on to your local newspaper.

### Field Day Release

#### "Hams" go radio-active June 26-27

Thousands of Amateur Radio operators, often called "hams," will be showing off their wireless capabilities June 26-27. Erecting radio stations in community parks, campgrounds, schools and emergency centers throughout the country, they will hold a "Field Day" to show their emergency communications abilities while having fun talking to friends all over the continent with their radios.

Amateur Radio activity is growing in the United States. In 2009 over 30,000 new people became "hams." The technical skills of hams also has improved as almost 50% of American Amateur Radio operators have gone beyond the entry level licensing requirements and passed the more difficult testing to earn higher class FCC licenses. There are more than 680,000 Amateur Radio operators in the US, and 2.5 million around the world.

In the past months, the news has had many reports of ham radio operators providing critical communications in emergencies world-wide.

During fires, earthquakes, tornados and other crises, Amateur Radio was often the only way by which people could communicate. Amateur Radio operators are often the first to provide critical early information and observations to emergency responders in crisis situations. FEMA, DHS, the National Weather Service, and emergency management offices have Amateur Radio Emergency Services (ARES) operators in their emergency communications plans. On June 26-27, the public will have a chance to meet and talk with the hams and see for themselves what the Amateur Radio Service is about. Using their digital and satellite capabilities, voice communications, radio and even Web-radio hybrid systems along with historic Morse code, they prove "It's not your Grandfather's radio anymore."

Using only emergency power, ham operators will construct temporary radio stations around the country for the weekend and send messages in many forms without the use of phone systems, internet or other infrastructure that can be compromised in a crisis. More than 35,000 amateur radio operators across the country participated in last year's event.

To learn more about Amateur Radio, go to [www.WeDoThat-Radio.org](#). The public is most cordially invited to come, meet and talk with the hams.

See what modern Amateur Radio can do. To find out where the Amateur Radio operators will be set up in your area, go to <http://www.arrl.org/field-day>. They can even help you get on the air!

## Testing & Local Swapfests

### VE Testing

**Next VE Testing on May 29th between 10am-noon.**

**No VEC Testing in: March, June, August or December.** All testing takes place at:

**Amateur Electronic Supply 5720 W. Good Hope Rd.  
Milwaukee, WI 53223**



### Swapfests

**Saturday, July 10, 2010 --- 6:00AM**

South Milwaukee Amateur Radio Club SWAPFEST!

American Legion Post #434  
9327 S. Shepard Ave  
Oak Creek, Wi. 53154  
Tickets: \$5.00  
Food & Beverages available after 6:00AM

### Working Committees

#### Field Day

- Open

#### FM Simplex Contest

- Joe – N9UX
- Jeff-K9VS
- Dave-WA9WXN
- Brian-K9LCQ
- Mark-AB9CD

#### Ticket drum and drawing

- Tom – N9UFJ
- Jackie – No Call

#### Newsletter Editor

- Michael-KC9CMT

#### Webmaster

- Joe Schwartz—N9UX

#### Refreshments

- Michael – KC9CMT

### Membership Information

The Hamateur Chatter is the newsletter of MRAC (Milwaukee Radio Amateurs' Club), a not for profit organization for the advancement of amateur radio and the maintenance of fraternalism and a high standard of conduct. MRAC Membership dues are \$17.00 per year and run on a calendar year starting January 1st. MRAC general membership meetings are normally held at 7:00PM the last Thursday of the month except for November when Thanksgiving falls on the last Thursday when the meeting moves forward 1 week to the 3rd Thursday and December, when the Christmas dinner takes the place of a regular meeting. **No meetings will be held in July and August during the very busy summer season.** Club Contact Information Our website address <http://www.w9rh.org>

Telephone (414) 332-MRAC (6722)

Address correspondence to:

**MRAC PO Box 070695,**

**Milwaukee WI 53207-0695.**

Email may be sent to

**w9rh@arrl.net**

Our YAHOO newsgroup:

**<http://groups.yahoo.com/group/MRAC-W9RH/>**

### CLUB NETS:

- Our Ten Meter SSB net is Friday at 8:00PM on 28.490 MHz ± 5 KHz USB.
- Our Two Meter FM net follows the Ten meter net at 9:00PM on our repeater at 145.390MHz - offset (PL 127.3)

## Milwaukee Area Nets

Mon.8:00 PM 3.994 Tech Net	Thur. 8:00 PM 50.160, 6 Mtr SSB Net
Mon.8:00 PM 146.865- ARES Walworth ARRL News Line	Thur. 9:00 PM 146.910 Computer Net
Mon.8:00 PM 146.445 Emergency Net	Fri. 8:30 PM 28.490 MRAC W9RH 10 Mtr Net SSB
Mon.8:00 PM 146.865- ARES Net Walworth	Fri. 9:00 PM 145.390 W9RH 2 Mtr. FM Net
Mon.8:45 PM 147.165- ARRL Audio News	Sat. 9:00 PM 146.910 Saturday Night Fun Net
Mon. 9:15 PM 444.125+ Waukesha ARES Net	Sun 8:30 AM 3.985 QCWA (Chapter. 55) SSB Net
Mon.9:00 PM 147.165- Milwaukee County ARES Net	Sun 9:00 AM 145.565 X-Country Simplex Group
Tue.9:00 AM 50.160 6 . Mtr 2nd Shifter's Net	Sun 8:00 PM 146.91 Information Net
Tue. 7:00 PM 145.130 MAARS Trivia Net	Sun 8:00 PM 28.365 10/10 International Net (SSB)
Tue. 8:00 PM 7.035 A.F.A.R. (CW)	Sun 9:00 PM 146.91 Swap Net
Wed. 8:00 PM 145.130 MAARS Amateur Radio Newline	
Wed. 9:00 PM 145.130 MAARS IRLP SwapNet d FM-38 Repeaters (IRLP 9624)	

**2 meter repeaters are offset by 600KHz -- 70 centimeter repeaters are offset by 5 MHz**

**SSB frequencies below 20 meters are LSB and for 20 Mtr and above are USB.**

**Governor Doyle has declared May 12, 2010 as NOAA All Hazards Weather Radio Awareness Day. The campaign is to encourage Wisconsin residents to keep ahead of severe weather by tuning into the NOAA Weather Radio stations, a 24-hour source of weather forecasts, watches, warnings, and non-weather emergency information provided by the National Weather Service.**

Known as "smoke detectors for severe weather and hazardous conditions" they now also broadcast non weather emergency messages (chemical spills, 9-1-1 outages, evacuation notices, etc). A NOAA Weather Radio with an alarm and battery back-up is one of the best ways to protect your family, especially at night when the alarm feature can wake you up during severe weather and give you and your family time to seek shelter. If there is no severe weather then your All Hazards radio can be switched to a silent, stand-by mode.

The NOAA Weather Radio All Hazards network is the sole government-operated radio system to provide direct warnings for all hazardous conditions that pose a threat to lives and property. There are 37 stations covering Wisconsin that broadcast weather and hazards information, and over 1,000 stations nationwide.

All Hazard Weather radios come in many sizes with a variety of functions and costs. Most major electronic stores carry them. Most radios are either battery-operated portables or AC-powered desktop models with battery backup. The portable weather radios are an important item to take along when you are outdoors, camping, hunting and boating.

Many receivers have digital technology called Specific Area Message Encoding (SAME) that allows users to program their radios to alarm only for hazardous conditions that affect their county. A weather radio is an essential part of a severe weather safety plan. Every home, business, public area, or large venue should have a NOAA Weather Radio. <http://www.weather.gov/nwr/>

